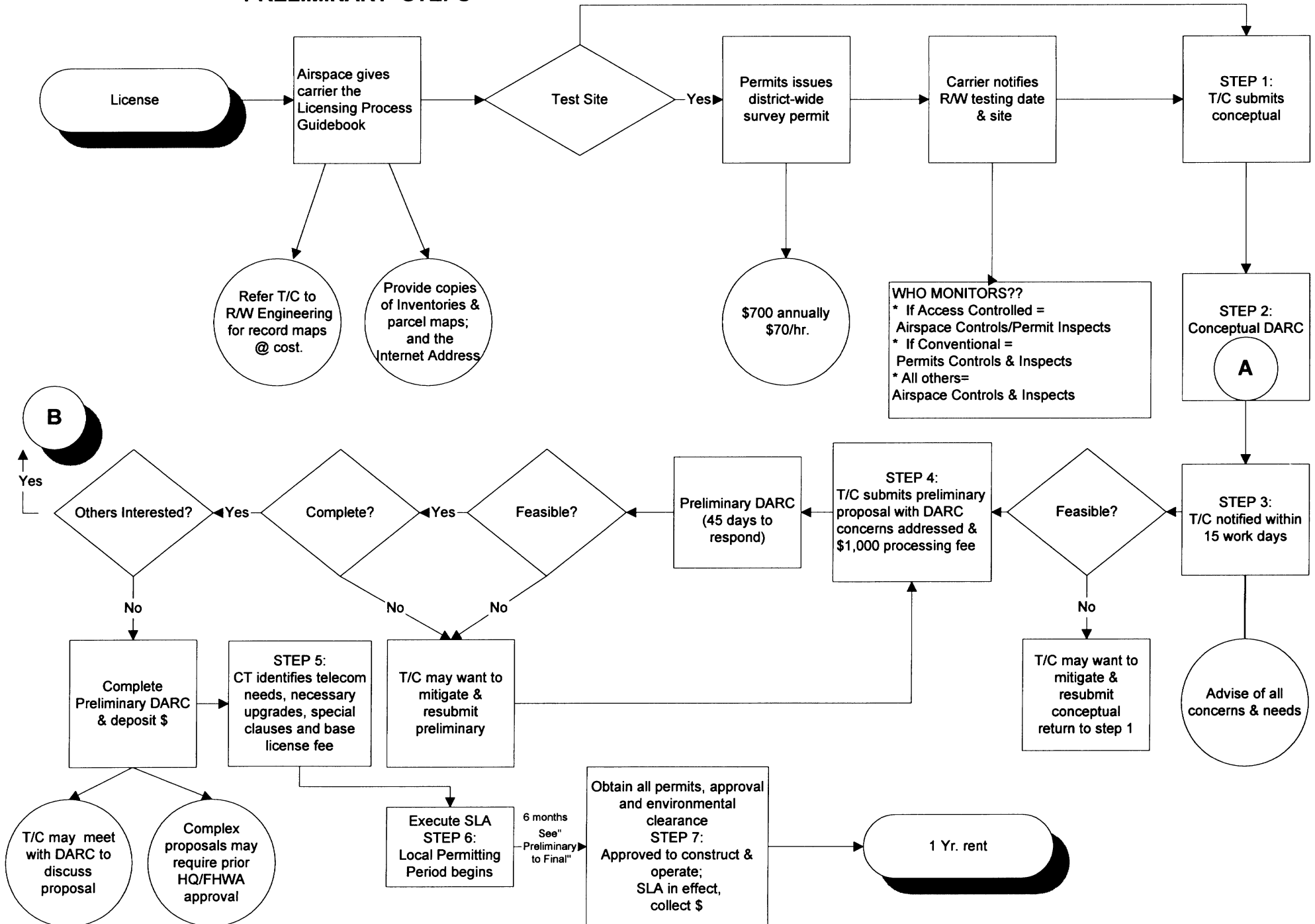
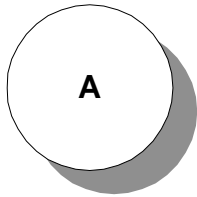


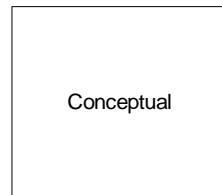
EXHIBITS

PRELIMINARY STEPS

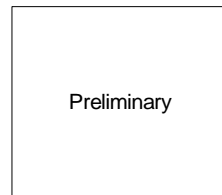




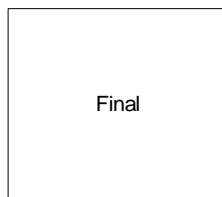
DISTRICT AIRSPACE REVIEW COMMITTEE (DARC)



1. Does the idea make sense?
Any objections?
Any telecommunication needs, or required upgrades?
2. Highest best use-us there another development that would generate a higher rate of return?



1. What are the potential rents versus potential risks?
2. Are there others interested?
3. Review package-is it complete?
Is the proposal feasible?
Are all memebers concerns adressed?
Meet with T/C



1. What are the potential rents versus potential risks?
2. Are there others interested?

Committee Members

Core:

Right of Way Airspace
Traffic Operations
Maintenance Operations
Environmental

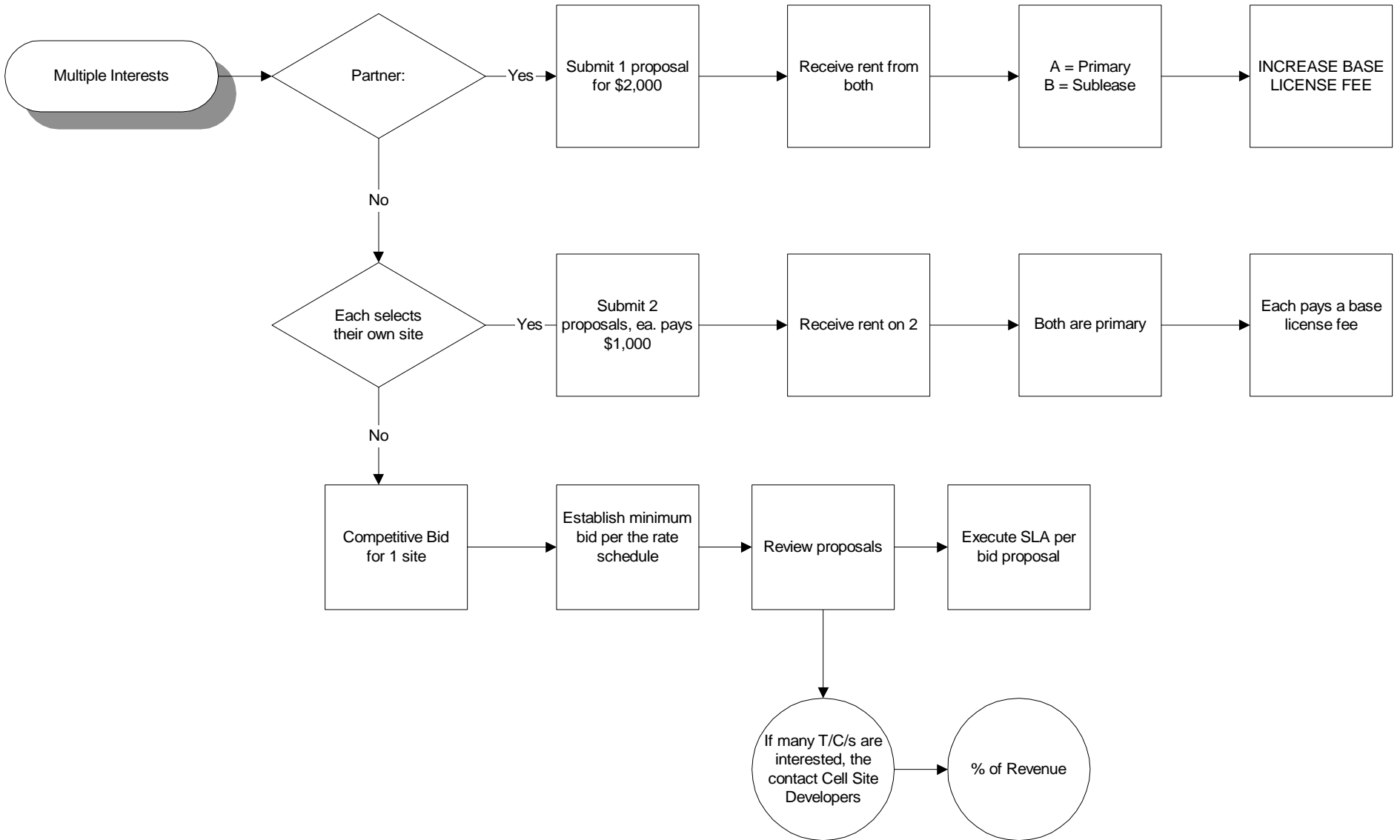
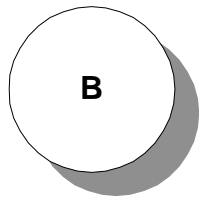
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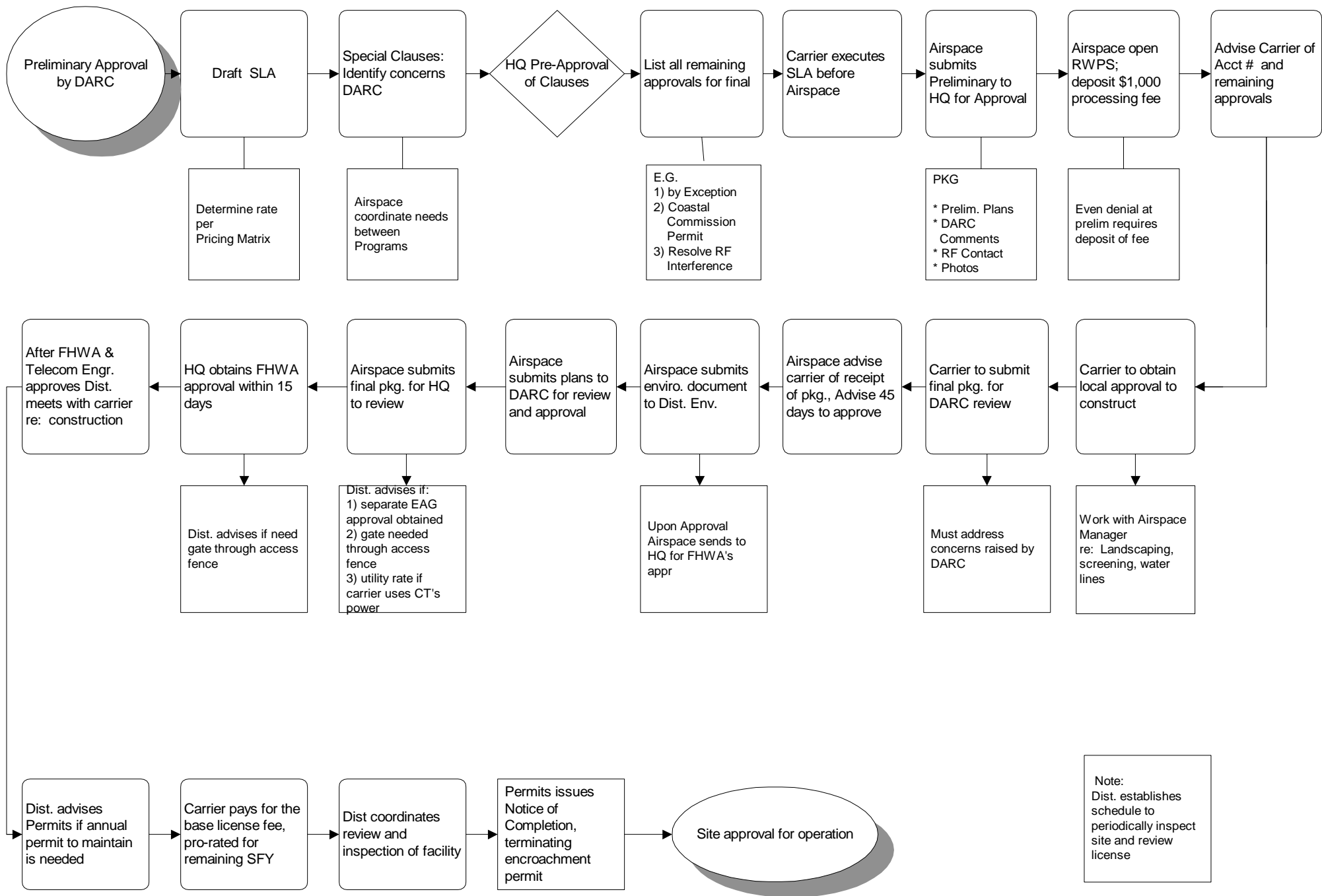
IF "Off System"
Facilities

OR:

IF "On-System - operating
and non-operating right of
way"
Project Development
Landscape Architect
and the Operator of the
Facility

i.e. Park and Ride, Roadside
Rests, Structures, Bridges, Signs,
Poles, etc.





SLA No. _____

Dist.- Co.- Rte.- Parcel - Tenancy

Premises: _____

SITE LICENSE AGREEMENT

Subject to the terms and conditions of the Master License Agreement ("MLA," 1997 form) between the undersigned Licensee and Licensor, Department of Transportation, the following described location is licensed to Licensee for unmanned telecommunications purposes:

1. Licensee: _____
2. Site Address/Description: _____

3. Geographic Area Category: Prime Urban Urbanized Rural
4. Equipment Classification: Macrocell Minicell Microcell
5. Base Annual License Fee: _____
(Fee to be increased 3 1/2%, effective each June 30, commencing June 30, 1998. Annual License Fee is due by June 30 each year. The initial License Fee will be prorated to the next June 30, and will be past due after ten days of the Commencement Date.)
6. Effective Dates: The "Execution Date" is the date Licensor signs this Agreement. The "Commencement Date" is the date of the Encroachment Permit for construction, not to be later than six months after the Execution Date, unless extended per the terms of the MLA).
7. Local Licensor Contacts for access or emergencies (names, titles, phone, pagers, etc.)

(Licensee will be responsible for all overtime charges)
8. Local Licensee Contacts for access or emergencies (names, titles, phone, pagers, etc.)

9. Term/Renewals: As provided in Master License Agreement, unless a shorter term or number of renewals is specified as a special term or condition.
10. Pursuant to MLA Section 4 (g), Licensor advises it is (likely) (unknown if) Licensor will desire to retain the tower/ancillary improvements at the conclusion of this Site License.

11. Special terms, conditions or other notes are attached and initialed by the parties. Examples include any Licensor use, known hazardous substances, special access, maintenance responsibilities, permit requirements, or co-location requests.

___ Check here if there are special terms or conditions to this agreement.

ATTACHMENTS

For Preliminary Approval of this Site License Agreement, the following documents must be attached:

- A. Preliminary description and/or map(s) of premises and site licensed, including location of equipment, access and utility routes.
- B. Estimated Equipment Technical Specifications.

For Issuance of the Encroachment Permit to allow construction, the following documents will be needed in addition to approval of the final copies of A and B above:

- C. Copy of Local Building Permit and/or local governmental approvals.
- D. Environmental Approvals from FHWA.
- E. Any legal description of the site developed by Licensee or submitted to the PUC.
- F. Recording: if Licensee requires recorded notice, Licensee should submit a complete form, a copy of which will be included as an exhibit to this Site License. Licensee is responsible for obtaining any necessary legal description.
- G. Planned regular maintenance schedule.

DATED: _____

LICENSEE: _____

BY: _____

ITS: _____

DATED: _____

("Execution Date")

LICENSOR: DEPARTMENT OF TRANSPORTATION

BY: _____

ITS: DISTRICT AIRSPACE MANAGER

ANNUAL BASE LICENSE FEE, adjusted 3.5% beginning July 1, 1998

(rounded to the nearest whole dollar and divisible by 12)

July 1, 1997 - June 30, 2012

	July 1, 1997	July 1, 1998	July 1, 1999	July 1, 2000	July 1, 2001
MACROCELL					
Prime Urban (Cat 1)	\$21,000	\$21,732	\$22,500	\$23,280	\$24,096
Urban (Cat 2)	\$16,200	\$16,764	\$17,340	\$17,964	\$18,588
Rural (Cat 3)	\$12,000	\$12,420	\$12,840	\$13,308	\$13,776
MINICELL					
Prime Urban (Cat 1)	\$18,000	\$18,636	\$19,260	\$19,956	\$20,652
Urban (Cat 2)	\$15,000	\$15,528	\$16,080	\$16,632	\$17,208
Rural (Cat 3)	\$12,000	\$12,420	\$12,852	\$13,308	\$13,776
MICROCELL					
Prime Urban (Cat 1)	\$15,000	\$15,528	\$16,068	\$16,632	\$17,208
Urban (Cat 2)	\$12,000	\$12,420	\$12,852	\$13,308	\$13,776
Rural (Cat 3)	\$9,900	\$10,248	\$10,608	\$10,980	\$11,364

	July 1, 2002	July 1, 2003	July 1, 2004	July 1, 2005	July 1, 2006
MACROCELL					
Prime Urban (Cat 1)	\$24,936	\$25,812	\$26,712	\$27,648	\$28,620
Urban (Cat 2)	\$19,236	\$19,908	\$20,616	\$21,336	\$22,080
Rural (Cat 3)	\$14,256	\$14,748	\$15,264	\$15,804	\$16,356
MINICELL					
Prime Urban (Cat 1)	\$21,384	\$22,128	\$22,896	\$23,700	\$24,528
Urban (Cat 2)	\$17,808	\$18,444	\$19,080	\$19,752	\$20,448
Rural (Cat 3)	\$14,256	\$14,760	\$15,264	\$15,804	\$16,356
MICROCELL					
Prime Urban (Cat 1)	\$17,820	\$18,444	\$19,080	\$19,752	\$20,448
Urban (Cat 2)	\$14,256	\$14,760	\$15,264	\$15,804	\$16,356
Rural (Cat 3)	\$11,760	\$12,168	\$12,600	\$13,032	\$13,488

	July 1, 2007	July 1, 2008	July 1, 2009	July 1, 2010	July 1, 2011
MACROCELL					
Prime Urban (Cat 1)	\$29,628	\$30,660	\$31,728	\$32,844	\$33,996
Urban (Cat 2)	\$22,848	\$23,652	\$24,480	\$25,332	\$26,208
Rural (Cat 3)	\$16,932	\$17,520	\$18,132	\$18,768	\$19,428
MINICELL					
Prime Urban (Cat 1)	\$25,392	\$26,280	\$27,204	\$28,152	\$29,136
Urban (Cat 2)	\$21,156	\$21,900	\$22,668	\$23,460	\$24,276
Rural (Cat 3)	\$16,932	\$17,520	\$18,132	\$18,768	\$19,428
MICROCELL					
Prime Urban (Cat 1)	\$21,156	\$21,900	\$22,668	\$23,460	\$24,276
Urban (Cat 2)	\$16,932	\$17,520	\$18,132	\$18,768	\$19,428
Rural (Cat 3)	\$13,968	\$14,460	\$14,964	\$15,480	\$16,020

PROPOSAL CHECKLIST

CONCEPTUAL: A Carrier's formal letter to Airspace detailing the proposed facility, including:

1. Name of Caltrans' contacts to date and issues discussed to date, if any, regarding the proposal.
2. Description of the proposed facility (type, height, area needed).
3. Location - site address, route, or other identifier (e.g., SW corner of the Tahoe City Maintenance Yard) and a map depicting the proposed Facility.
4. Diagram of the proposed facility depicting how access and utilities will be obtained.
5. Any additional information that might be helpful in "visualizing" the proposal and its potential impacts on the surrounding facilities, i.e., altered photos showing the proposed facility.
6. Narrative describing the proposed facility, time frame, and maintenance schedule.

PRELIMINARY: The Carrier's formal package to Airspace detailing the proposed facility, including:

1. Copy of the conceptual approval letter and any follow-up letters or discussions related to the issues raised during the conceptual phase.
2. Plans (one full size original, a minimum of four reduced to 8.5" x 11") detailing the exact location, size, and method of installation for all permanent improvements, including:
 - A plot plan, property dimensioned, showing the location of the proposed facility (noting additional area needed for construction, if applicable), and its relationship to any and all existing facilities at the site.
 - Technical specifications on the radio transmissions and equipment that will be used.
 - Landscaping details to include methods to prevent soil erosion or to protect slopes.
 - Fencing, sidewalks, signs and other minor improvements.
 - Access way, parking areas and identification of any areas to be paved or striped (including the materials to be used).
 - Utilities (including trenching specifications).

3. Approximate cost of project, including construction, permanent improvements to site, removal improvements (not including the radio equipment), and required upgrades.
4. Project time frame.
5. Lease term requested and any option periods needed. (Standard is ten years with three 5-year options.)
6. Carrier's name: what entity goes on document as licensee.
7. Name of the Project Manager (employee, broker, or consultant) representing Carrier authorized to negotiate with Caltrans and assist District Airspace Manager (Airspace) in processing the document.
8. Name of the Carrier's Radio Frequency (RF) Engineer who will work with Office of Radio Communications Engineers (Telecom Engr) regarding review of plans and specifications and possible sharing of the facility.
9. Narrative describing how installation and construction will be performed in order to minimize the impact on Caltrans' operations (e.g., traveling public, commuters at a park and ride, workers at a maintenance station).
10. A non-refundable administration fee of \$1,000.00 to cover the staff costs related to the review of the preliminary proposal.
11. Additional fees may be charged by Department of General Services (DGS) if studies of potential interference are required because of the proximity of the proposed facility to other telecommunications facilities operated by other governmental entities.
12. Copy of the district's permit to test.
13. Further details of the monthly maintenance schedule of activities (e.g., the types of vehicles and equipment to be used, general locations of the vehicles and equipment during typical maintenance operations, identification of any vehicles and equipment that will be stored on the site).
14. Anticipated method of installation for Caltrans' equipment - and if at the time of Carrier's initial construction, identification of who will do the installation (and approximate cost if by the Carrier).
15. Responses to all the issues raised during the conceptual DARC.

FINAL: Carrier submits final construction plans detailing excavation, trenching and utilities, addressing all concerns from the preliminary DARC. Airspace, HQ Telecom and FHWA all requests a final review. A formal letter from Airspace to Permits, with a copy to the Carrier, stating that the Carrier has complied with all requirements to obtain permission to construct, including:

1. Environmental Document.
2. Final DARC review of construction plans.
3. Building Permit.
4. Application for Encroachment Permit.
5. FHWA and Telecom Engr final approval of the construction plans.
6. Annual maintenance permit to maintain the equipment located inside the right of way.
7. Copy of the legal description submitted to Public Utilities Commission (PUC).
8. Payment of the annual base license fee through the remaining state fiscal year (June 30th).
9. Identification of Caltrans equipment to be installed on the facility.
10. Responses to all the issues raised during the preliminary DARC.
11. Final construction schedule - who, what, when, where.

PLANS SUBMITTAL

CONCEPTUAL: No plans are required as this phase is just to determine the feasibility and availability of a Caltrans parcel for a facility. (Refer to Proposal Checklist for submission requirements).

PRELIMINARY: The following items must be included on the preliminary plans of the proposed facility:

1. State Highway or Interstate Route number, milepost and direction.
2. Municipality and county.
3. North arrow, scale latitude and longitude.
4. Location of adjacent streets for alternate access location.
5. Right of way line (include copy of Caltrans right of way record map when utilized).
6. Location of adjacent setback of proposed structures (monopoles, towers, shelters, equipment, conduits, fencing, and parking).
7. Identification of the safety clear recovery zone if within access control (include calculation).
8. Location of any existing Caltrans structures (i.e. buildings, equipment, guiderails, access roads, columns).
9. Identify topography, including slopes within access control area.
10. Location of aerial and underground utilities (fiber optic, electrical, telephone, etc.), and the proposed method of accessing utilities from outside the access control area.
11. Location and setback from bridge structures (include bridge number).
12. Block, lot number, and lot lines of adjacent lots (include tax maps) and identify current use/improvements on adjacent property.
13. Existing landscape (outline of vegetation) with landscaping to be proposed and/or trees to be removed.
14. Height of the structure (monopole/tower) and antenna elevation.

15. Location of existing and proposed access points, driveways, and parking areas.

Plans should address all issues raised by the DARC during the conceptual review and any variations from the official Siting Guidelines and the Caltrans Design Manual.

FINAL: In addition to the information above, the following items must be included on the final plans of the facility:

1. Excavation plans for the monopole/tower, conduits, equipment shelters, and other structures.
2. Landscape plan, including irrigation/drip system and, if applicable, soil erosion and sediment control (include elevations, details showing architectural treatment, colors of the various facility components, etc.)
3. Curbing, sidewalks, stairs, driveways - existing and proposed (including curblane opening, driveway width, and alignment with respect to the adjoining highway or local road).
4. Include construction materials for #3, i.e. concrete, gravel, pavement.
5. Signs: regulatory, warning, directional, and private.
6. Highway striping, shoulder widths, slope, and fencing.
7. Dimension from the right of way line to the edge of pavement.
8. Distance of nearest traffic signal, ramp, or access point if less than 250 feet.
9. Plans for construction and maintenance (including a construction schedule and an "estimated" maintenance schedule).
10. Construction and attachment details, including design criteria and material specifications.
11. Details of equipment to be used to transmit and receive radio signals (include height, location on the monopole/tower, conduit, frequency, power).

Plans should address all issues raised by the preliminary DARC review and by other approving entities (FHWA, Telecom Eng, etc.) and any variations from the official Siting Guidelines and the Caltrans Design Manual.

SUMMARY OF THE MASTER LICENSE AGREEMENT TERMS and CONDITIONS

USE: Wireless Telecommunications Facilities, typically a monopole or tower, and an equipment shelter.

TERM: Master License Agreement – 5 years, ending June 30, 2002. All future Site License Agreements will comply with new terms and conditions. Site License Agreement – ten years with three 5-year options in accordance with the terms of the current Master License Agreement.

RATE: Annual Base License Fee per a two-tiered matrix for location and equipment with adjustments and reevaluation.

FEES: Administrative and permit fees to cover the costs of surveys, inspections and preliminary/final reviews of the proposals.

INITIAL OPTION: Six month “permitting” period for the carrier to obtain all necessary reviews and approvals, including Federal Highway Administration’s (FHWA), required for construction; which can be extended at full rent.

COLOCATION: Where physically possible and desired by other carriers, subject to the internal review and approval by the Department and FHWA. Collocatee who shares the same equipment building or cabinet and the same monopole or tower will pay a rate based on the higher of a) 50% of the gross monies paid to the primary licensee, or b) 50% of the annual base license fee. Carriers who share the same monopole or tower will pay separate annual base license fees based on the square footage of the fenced area for their equipment and/or the number of antennas placed on the joint tower or monopole.

IMPROVEMENTS: At the Department’s option, the ownership of the tower or monopole can be transferred to the State at the termination or cancellation of the site license agreement. If the carrier cancels or terminates the agreement, The Department can keep the improvements (tower or monopole) for its continued use without payment. If The Department cancels or terminates the agreement, but needs the improvements (tower or monopole) for its continued use, The Department will credit the carrier with the unamortized cost of the improvements, up to \$60,000, for the first 10 years.

EXTENSIONS: At the end of each term (10, 15, and 20), the District Airspace Review Committee will convene if the carrier has advised that it would like to extend the site license agreement, to ensure that the use will not interfere with any current or future operations.

CANCELLATION: The Department can cancel the SLA if there is a conflicting transportation project (e.g. widening a nearby ramp) or operation (e.g. interference with a nearby electronic toll collection facility). The Department will assist the carrier with the location of another suitable facility, and credit the carrier with the unamortized costs of improvements, up to \$40,000, for the first five years. Carrier can cancel the SLA for commercial reasons and pay damages to the Department equal to 18 months of rent, or the remaining term of the SLA, whichever is less.

CALTRANS RADIO NEEDS: The Department reserves the right to share space with the carrier by placing its equipment * on the top of the tower or monopole, and within the equipment building or to place an equipment cabinet on the foundation. a) five square foot area on the foundation for an equipment cabinet, or a 28 square foot area of vault space, b) room on the top of the monopole or tower for a 42", 20 pound omni-directional "bat" antenna.

LIABILITY: The Department will be held harmless from all claims relating to carrier's use of property or equipment, and Carrier will have a \$5,000,000 insurance policy.

OTHER: Standard array of legal clauses (defaults, assignments, notices, California law, prevails, repair notice, hazardous materials restrictions) that are similar to standard airspace lease agreements.

FINANCIAL STATEMENTS: Carriers will provide copies of their annual financial statements.

SITE LICENSE AGREEMENT - SPECIAL CLAUSES

LICENSOR'S USE:

1. Licensor will immediately exercise its right to share the facility with Licensee as follows:
Who will install: _____ (include time frame)
Estimated cost: _____
Payment within ___ days of receipt of invoice, paid by District Traffic Operations/Maintenance Telecommunications Office.
Licensor's use (tower, equipment area, conduit) is identified on the approved construction plans.
2. Licensor's equipment installed at this site will be a 880 MHz mobile repeater.
3. Licensee will install # surveillance cameras and its supporting equipment describe at height of the tower/monopole.
4. The State has no known telecommunications needs at this site, but reserves for the future its right to collocate with existing users.

ACCESS:

5. Access will be _____ describe how and where _____. Licensee will maintain the access way for ingress and egress to the facilities free of dirt, litter, and debris. Access is noted on the approved plans for construction.
6. Licensee will provide and maintain their own lock and key for the existing gate.
7. The premises has a paved area _____ describe where _____ that will be used for parking of all construction and future maintenance vehicles. Parking is noted on the approved plans for construction.
8. As access to the (tower) (antenna) (equipment) is from within access control, Licensee must receive permission from the District Permits Office prior to installing, maintaining, inspecting, modifying any of the equipment. Such request will be in compliance with the Permits Manual. Licensee further acknowledges that no person, employee, vehicle, equipment will be allowed at the facility that is located within the access control without complying with all the terms of the permit, including appropriate safety measures such as traffic controls. If this provision is violated at any time, Licensor may immediately cancel this Site License.

MAINTENANCE:

9. In addition the requirements in the Master License Agreement to keep the area around the equipment and tower free of dirt, litter, debris and graffiti, Licensee will maintain describe (i.e. landscaping, slopes, fencing, sprinklers, removing graffiti within 24 hours)
10. Licensee will comply with the (local agency's name) siting requirements describe, i.e. aesthetic issues _____ for similar type facilities, and will submit these plans to Licensor for review and approval.
11. Licensee will coordinate construction of their facility with the Caltrans consultant who will be responsible for the construction of a Caltrans project (i.e. an adjoining paving project, widening the park and ride lot, replacing signs, seismic retrofit).

HAZARDOUS MATERIALS:

12. There are (known) (unknown) hazardous substances at this location. (Select one).

PERMITS:

13. In addition to the Encroachment Permit to construct, the Licensee will be required to obtain and keep on file an active maintenance utility permit to maintain equipment within access control.
14. No additional permits from the District Permits Office will be required for this facility once the Notice of Completion of the Encroachment Permit is issued.

COLOCATION:

15. There is a mutual agreement between the Licensee and (Carrier's name) who will collocate as a (sub-user) (direct-user) at this location subject to all reviews/approvals.

SITE:

16. Licensee will enclose the (equipment area) (tower) with a security fence dimensions, material, accessories _____.
17. Licensee acknowledges Licensor's electronic toll collection equipment is in the vicinity, and Licensee's use of this site, including radio frequency, will not interfere with Licensor's toll collection facility.

18. Utility Submetering and Estimated Payment: Licensee has requested use of Licensor's power at this Site as there is no direct utility power available. Such request is subject to approval by the Encroachment Permit by Exception Committee, and if approved, Licensee will be solely responsible for insuring all uses of Licensor's power comply with the requirements of the California Public Utility Commission, Licensor's supplying utility company, and additional requirements of Licensor. Licensee agrees to defend, indemnify and hold Licensor harmless from any action or claim challenging Licensee's use of Licensor's power, and waives any claims against Licensor for electrical outages or interruptions.

Licensee shall install a submeter at the Site and shall pay as an additional fee for the cost of utility service provided Licensee annually as part of the annual Base License Fee. The parties agree the annual Base License Fee shall be increased by \$600 for utility service

By June 1st of each year during the SLA term, Licensor and Licensee shall jointly calculate any necessary adjustment to the utility charge portion of the annual license fee based on readings from the utility meter at the Site and the rates currently charged by the applicable utility. If the parties cannot agree on the amount of the Utility Charge, it shall be submitted to an arbitrator reasonably acceptable to both parties.

19. Licensee will provide Licensor with as built plans to include photographs of the site and location of the utilities within 30 days of construction.

DETERMINING THE BASE LICENSE FEE

#1 - Single CARRIER on a site:

CARRIER wants to install a facility at a maintenance station wherein the fenced area would include a prefabricated building 230 square feet, supporting foundation and a monopole. Total fenced area is 965 square feet. The monopole will support three antenna sectors with 4 antennas each for a total of 12 antennas. The site is in a yellow area (urban) in Santa Clara County. Base License Fee for a prime urban macrocell site is \$21,000 year.

#2 - Colocation Proposal (Sub User)

Same situation as #1, but a second CARRIER wants to share the space in the prefabricated building and put one antenna on the monopole. This is a Sub-User and the Base License Fee is 50% of what is paid to the First CARRIER or 50% of what the pricing matrix would establish for the Second CARRIER. In this case, the Base License Fee per the pricing matrix is prime urban and microcell (1 antenna) which is \$15,000. 50% is \$7,500 year. Note: the Second CARRIER can put up to 3 antennas on this site for the same Base License Fee.

#3 - Colocation Proposal (Direct User)

Same situation as #1, but a second CARRIER wants to share the monopole/tower and mount six antennas on it but have their own space for their equipment in a prefabricated building that will be fenced. Total fenced area is 400 square feet. This is a Direct-User and the Base License Fee is 100% of the pricing matrix (as if the Second CARRIER were on the site by themselves). In this case, the Base License Fee per the pricing matrix is prime urban and minicell (6 antenna) which is \$18,000.

Subsequent CARRIERS are treated the same, there is no reduction in the base license fee charged to the previous CARRIERS at the site.

#4 - Colocation within a CALTRANS facility

CARRIER wants to utilize a 25 square foot area within an existing equipment building and place one antenna on an existing monopole. The geographical area is prime urban.

This would result in a microcell category for a \$15,000 annual base license fee. However, colocation rate is only 50% when the CARRIER shares both the equipment area and the monopole/tower (even if the building is CALTRANS')

#5 – Multiple sites by one CARRIER within a corridor

CARRIER wants to install six antennas at various locations within a corridor i.e. at a lightpole, a directional sign, on a bridge/overcrossing, within an interchange, on a toll facility plaza and at a maintenance turnout. The geographical area is urban and the equipment areas will not be fenced. There are no monopoles or towers at four of the sites as the antennas are mounted on CALTRANS structures, fixtures, or buildings. At the other two sites the CARRIER will mount the antennas on a small pole. Each site will have one omni antenna and one microwave antenna.

Each site is classified as a minicell (2 antennas) as long as the total square footage for the equipment itself does not exceed 300 square feet. The total area reserved for the CARRIER including conduit, parking, concrete foundation should be reviewed to ensure the minicell category is correct.

Each site's Annual Base License Fee is \$12,000. There is no discount for multiple sites in a corridor, nor can all sites be classified as one facility (six sites times 2 antennas each).

**Conceptual Proposal
License Caltrans' Owned Property
for Telecommunications (Wireless) Facilities**

-CONFIDENTIAL-

DATE _____

TO: District ____ Airspace Review Committee
Attn: Airspace Manager, _____

Firm's Name: _____

Representative's Name: _____

Representative's Phone Number: _____

INTERESTED IN LICENSING A SITE (Please use one form per site):

Address, description, location: _____

County/Route/PostMile (if applicable): _____

Reference number on inventory (if applicable) _____

Current use (if ascertainable) _____

Proposed use (vault, antenna, tower): _____

Proposed area needed (width, depth and height): _____

How is independent access available? _____

How will power be provided? _____

Telecommunication facilities on site now (if any) _____

Need site by (time frame) _____

Option period to obtain approvals and clearances? (Approximate number of months) _____

Construction period? (Approximate number of months) _____

Willing to colocate or allow colocation? _____

Willing to provide the Department with space, services, capacity? (Explain) _____

Is firm a licensed carrier? _____

Is representative an employee of the firm or a consultant/broker? _____

Note 1: It is not necessary to submit preliminary plans or specifications at this time but a simple sketch or drawing of the site and possible location of the facility is encouraged.

Note 2: This format is a guide of the type of questions the District Airspace Review Committee may need answered in order to determine the feasibility and compatibility of a telecommunications facility.

This expression of interest will not constitute notice of intent to license under the Master License Agreement. Caltrans reserves the right to deny any and all requests for access in accordance with its District Airspace Review Committee's guidelines. Approval does not constitute notice of intent to lease but rather approves the site for consideration of leasing to any and all interested parties through the Airspace Leasing process.

**“SAMPLE”
DARC COMMENTS**

Maintenance

“Request is approved as proposed”

OR

“Installation and operation shall not result in the removal of any existing landscaping. Any added maintenance costs resulting from installation and operation shall be the responsibility of the requestor”

Traffic Investigations

“Maintenance should be consulted regarding site”

OR

In addition to trees, no existing bushes or shrubs should be removed since they provide a visual barrier”

Permits

“Locate where least visible to traffic”

Environmental Planning

“Request is approved providing that there will be no biological or cultural resources that will be impacted”

OR

“Request is approved”

DEFINITIONS used by the TELECOMMUNICATIONS INDUSTRY

Analog Technology: The traditional method of modulating radio signals to carry information. Voice messages are electronically replicated and amplified as they are carried from the transmitting antenna to the receiving antenna.

Antenna: Any system of wires, poles, rods, reflecting discs, or similar devices used for the transmission or reception of electromagnetic waves.

Band: A clearly defined range of radio frequencies dedicated to a particular purpose.

Bandwidth: A relative range of frequencies that can carry a signal without distortion on a transmission medium.

Basic Trading Area (BTA): A service area designed by Rand McNally and adopted by the FCC to promote the rapid deployment of PCS providers. There are 493 BTAs in the United States.

Cell: The basic geographic unit of a cellular system, and the basis for the generic industry term "cellular". Each cell is equipped with a low powered radio transmitter/ receiver. By controlling the transmission power, the radio frequencies assigned to a cell can be limited to the boundaries of that cell. When a cellular phone moves from one cell toward another, a computer at the Mobile Telephone Switching Office (MTSO) monitors the movement and at the proper time, transfers or hands off the phone call to the new cell and another radio frequency. The handoff is performed so quickly that is not noticeable to the callers.

Capacity Site: Shorter telecommunications structures that cover smaller areas with amore concentrated demand. Capacity sites serve to increase the capacity when surrounding sites have reached their practical channel limits.

Coverage Site: Higher telecommunications structures covering a larger geographical area, but with a lower service demand. Coverage sites serve to expand coverage in large areas or in areas with difficult terrain and to enhance coverage for portable systems. Coverage sites allow users to make and maintain calls as they travel.

Cellular Geographical Service Area (CGSA): The actual area in which a cellular company provides cellular service, usually smaller than the MSA surrounding it.

Channel: A path along with a communications signal is transmitted.

Code Division Multiple Access (CDMA): a spread spectrum approach to digital transmission wherein each conversation is digitized and then tagged with a code. The mobile phone is then instructed to decipher only a particular code to pluck the right conversation off the air.

Digital Technology: Data, including voice messages, are converted into digits that represent sound intensities at specific points in time. The two forms of digital technology, CDMA and TDMA, render multiple access over one frequency or channel.

Electromagnetic Fields (EMFs): Though referred to as radiation, EMFs do not actually radiate from a source. They are best described as local electric and magnetic fields that envelop the surrounding space. The most common source of EMFs is from the movement and consumption of electric power - transmission lines, household appliances electronic devices and lighting.

Hertz: A measurement of electromagnetic energy, equivalent to one “wave” or cycle per second. (Megahertz - MHz: Millions of Hertz)

Major Trading Area (MTA): A PCS area designed by Rand McNally and adopted by the FCC. There are 51MTAs in the United States.

Metropolitan Statistical Area (MSA): An MSA denotes one of the 306 largest urban population markets as designated by the US government. Two cellular operators are licensed in each MSA.

Mobile Telephone Switching Office (MTSO): The central computer that connects a cellular phone call to the public telephone network. The MTSO controls the entire system’s operations, including monitoring calls, billing and handoffs.

Radiofrequency Radiation (RFR): One of several types of electromagnetic radiation consisting of waves of electric and magnetic energy moving together through space. These waves are generated by the movement of electrical charges. For example, the movement of a charge in a transmitting radio antenna, i.e. the alternating current, creates electromagnetic waves that radiate away from the antenna and can be picked up by a receiving antenna.

Stealth Sites: Sites architecturally blended into the existing environment e.g. hidden in a church bell tower, surrounded by a water tower, covered by a silo, disguised as a fir tree. Wherever these antennas are, nobody can see that they are antennas.

Telecommunications Facilities: Communications towers, antennas and the necessary appurtenances. A land use that sends and/or receives radio frequency signals, including antennas, microwave dishes or horns, structures or towers to support receiving and/or transmitting devices, accessory development and structures, and the land on which they are all situated.

Time Division Multiple Access (TDMA): A method of digital wireless communications transmission allowing a large number of users to access (in sequence) a single radio frequency channel without interference by allocating unique time slots to each user within each channel.

Source: "Telecommunications Information, A Reference Guide", October 30, 1996, Keith International

SAMPLE MEMORANDUM TO THE DARC

TO: DISTRICT AIRSPACE REVIEW COMMITTEE

ATTN: _____

Date:
Co-Rte-PM:
FLA No.:
Location:

Applicant:

FROM: _____ Airspace Manager

SUBJECT: REQUEST FOR AIRSPACE COMMITTEE REVIEW

☐ CONCEPTUAL ☐ PRELIMINARY ☐ FINAL

Please review the attached map for the above referenced Airspace parcel. The use contemplated is: _____

A. A formal meeting is scheduled for _____
(date, time, location)

B. Modification or new construction on an existing site. Describe:

PLEASE SUBMIT YOUR REPLY BEFORE _____ USING THE AREA BELOW.

1. Request is approved _____
2. Request is approved with the following conditions: _____
3. Request should be denied for the following reasons: _____

If you have no comments, please check ☐ if you want to see the final plans.

4. I have no objections to the proposed project.
5. Please see my attached comments.
6. I (or a representative) will attend the DARC meeting.

Signature

Date

Attachments

DEPARTMENT OF TRANSPORTATION

DISTRICT 7, 120 SO SPRING STREET
LOS ANGELES, CA 90012
TDD (213) 897-6610

**SAMPLE MEMORANDUM TO THE CARRIER**

Date

Location
Carrier:

Carrier Representative

Dear

This is advise you that _____ (carrier's) _____ proposal to locate a Telecommunications facility on the above referenced sites has been conceptually approved.

You may proceed with preliminary design plans at this time. Please submit _____ (#) _____ sets of preliminary plans along with a processing fee of \$1,000.00 for each site. This fee is to cover the cost of both preliminary and final plan review. Please make each check payable to Department of Transportation.

Thank you for your continued cooperation and should you have any questions, please call me at _____ (telephone number) _____ .

Sincerely,

Airspace Manager

Attachment: DARC Comments
Proposal Checklist
Plans Checklists

Note: This format can also be used to advise the Carrier of preliminary or final approval.

Note: This format can also be used to advise the Carrier that preliminary or final plans have been received, stating whether they are complete or requesting additional information. The letter should also provide a date when the DARC will grant approval, and if a Carrier representative should plan on attending the DARC.

SAMPLE MEMORANDUM TO A LOCAL PLANNING AGENCY

District Letterhead

Date

Local Planning Agency Address

State of California, Department of Transportation, (Caltrans) as owner of the property located at _____ in _____, California, hereby authorizes

(carrier) to make application for any all land use zoning permits necessary for the approval and installation for any and all land use and zoning permits necessary the approval an installation of cellular telecommunications facilities on this referenced property. Caltrans' approval of the (carrier's) proposal to install this facility is subject to preliminary/final review of the plans and specifications and the carrier's execution of the site license agreement.

Sincerely,

District Airspace Manager

Note: To be sent only when DARC has completed a conceptual review of a proposal & if carrier has signed the MLA.

SAMPLE MEMO for an ENCROACHMENT PERMIT by EXCEPTION

TO: Encroachment Chief, DLPP

DATE:

FILE:
PERMIT #:

FROM: (name/title)
Office of Permits-District ____

SUBJECT: Longitudinal Encroachment - Microcell and Access Road

Your formal approval is requested for a longitudinal encroachment along the _____
(site location: route, interchange, address, etc.)
is to allow a _____ cell site and an access (describe path)
(carrier)
_____ to the cell site.
(street/highway, address, other)

These proposed improvements will be allowed as an Airspace lease to be prepared and administered by Right of Way.

(Sample) Proposal Benefits and Impacts:

1. Two utilities to facilitate the microcell site will be placed within Caltrans right of way. The site will require a 110V power line and a telephone line to be placed underground between the right of way line and the access road.
2. The adjacent property owner would not allow maintenance access across their property to access the site.
3. Placing a site within this property is not feasible as contaminated material is known to be on the property.
4. If the encroachment is allowed, the district will require surfacing on the access road. The type of surfacing has not been determined; but it most likely will be AC pavement.
5. The proposal will provide short- and long-term benefits to Caltrans by providing revenue from the lease agreement.
6. An all-weather access road will be constructed which will be used by maintenance forces.

7. Access to the access-controlled right of way will be from a locked gate constructed in the right of way fence at_____.
(street/highway, etc.)

This access is from a low-volume local street and does not impact the freeway. The freeway is in an approximate 20' fill section with large pine trees screening the area beyond the toe of slope.

8. The access road will be constructed at existing grade and will not have any impact on existing drainage.

9. The cell-site fenced area is proposed to be_____. Access by
(dimension)

Maintenance forces around the cell site will not be restricted as there is/are approximately_____ between the toe of slope and right of way.
(feet/inches)

10. Other than the trees there is no landscaping. The existing soil is rocky and shaded by the trees.

There are no other access alternatives to a cell site at this location. Direct access to the cell from a gate in the fence is not available, as private property exists between _____ and freeway right of way.
(street/highway/other)

The proposal will not cause any operational, safety or maintenance problems.

Based on the above, I recommend approval of this longitudinal encroachment as shown on the attached location drawings.

(name), Chief
Office of Permits

Attachments

- Location map
- Aerial photo (site highlighted)
- Site plan

I Concur:

(name)	(name)	(name)	(name)
Program Manager	Program Manager	Program Manager	Program Manager
Maintenance	Project Dev.	Right of Way	Operations

DISTRICT CHECKLIST for Telecommunications Proposals

STEP 1: Receive request from Carrier to build a site on Caltrans property.

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Narrative or form describing:

1. Size pole, # of antennas, perimeter dimension (fenced area)
2. Type of facility (PCS, cellular, other)
3. Expected time schedule (building permits by ?, construction by ?)
4. Other collocatees?
5. Sketch or drawing of the area (site) needed on Caltrans facility (premise)
6. Optional: Depiction of the equipment (photo rendition, sketch, etc.)

STEP 2: Meet with the core DARC team to review the proposal

CORE: Traffic Ops, Environmental, Telecom Engr.

ADD (as appropriate): Landscape Architect, and the operator of the facility (e.g. park and ride, maintenance superintendent, or facilities manager)

IF IT IS WITHIN THE OPERATING RIGHT OF WAY

Add: project development

IF IT IS ON A STRUCTURE WITHIN OPERATING RIGHT OF WAY

Add: structures

IF IT IS UNDERNEATH A STRUCTURE

Add: hydraulics and fire marshal

IF IT IS ON A BRIDGE

Determine if it will be impacted by seismic retrofit

STEP 3: Advise Carrier of Conceptual Review response

☐

Send letter back to carrier, stating either A or B:

A. Conceptually your proposal is OK and please submit your preliminary proposal within 30 days or the site will be available for other carriers to submit proposals.

Note:

1. Response to the carrier is due within 15 working days of receipt of their conceptual proposal.

2. Inform the carrier that a full DARC review will be held once the preliminary package is submitted and include the preliminary package checklist.
3. If this is a new carrier (no MLA, no conceptualls, etc.), send them the "Guidelines to Licenses Sites" so they can become familiar with the program.
4. Ensure the carrier understands Caltrans' right to occupy the tower with a whip antenna (per the MLA) and carrier must provide conduit from a pad to the tower.

B. If the answer is NO, tell them why (e.g. completing 2 year seismic retrofit project - "come back then," widening off ramp, or consolidating maintenance station). Additionally, you may want to:

1. Offer to help them find a more suitable location
2. Provide them with inventories, databases, maps, and the Internet address

STEP 4: Preliminary Proposal submitted by carrier.

☐

Review it to ensure it meets the requirements of the checklist

- ◆ Ensure it is basically the same as the conceptual proposal.

☐

Hold the Preliminary DARC

- ◆ Make sure the right programs are represented (not too many or too few)

☐

Set a time frame to review the proposal. You can:

- ◆ Send them copies of plans with a form to use to respond with comments.
- ◆ Set a formal meeting time for complex issues or proposals.
- ◆ Keep the blueprints in a common room for 1 week for review at their discretion.
- ◆ Tell them that if no comments received back by a certain reasonable time, then "approved" is assumed. (This does NOT apply to the Telecom Engr. A non-response needs to be elevated to HQ/AS.)

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If HQ must be involved in the preliminary review, allow additional time:

- ◆ The Permit by Exception Committee, Structures Review or Seismic Retrofit coordination will require at least 15 working days to review/approve and get back to districts.
- ◆ FHWA (and sometimes Telecom Engr) review/approval is obtained after the preliminary DARC is completed.

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Advise carrier of review/approval of their preliminary proposal.

- ◆ Advise them final plans must address any issues raised during the DARC.
- ◆ The carrier may want to address any major concerns directly with the DARC.
- ◆ If possible, send them the SLA to execute (see Step 5)

☐

Deposit the \$1,000 processing fee

- ◆ If the proposal is for more than one carrier, but the plans show all the facilities (thus only one review was needed), only one fee is required.
- ◆ Open an account in RWPS for each carrier, depositing the processing fee in the primary carrier's account.

STEP 5: Execute the Site License Agreement

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Establish the base license fee per the matrix.

- ◆ HQ R/W must pre-approve any rates outside the matrix.

☐

Determine the "special clauses" for the SLA that cover:

1. Licensor's use of the facility (reserved space, additional antennas at cost, mounting of surveillance cameras, elimination of interference)
2. Access to and from the facility including notification, maintenance, gates.
3. Maintenance responsibilities of the carrier
4. Identify if the carrier will be responsible for obtaining a maintenance permit as the facilities and access are within the operating right of way. (Note this special clause does not apply to the need for an encroachment permit or a building permit as this is covered in the MLA.)

5. Other users at the site (colocation), stating that agreement has been reached between the parties and that a separate SLA will be needed for the other carrier and which carrier will be paying the base license fees.
6. The known and unknown hazardous substances at the site.
7. Identify any “upgrades” or “modifications” to the site that the carrier will be required to do prior to constructing, i.e. protecting the slope, building a gate, protecting some trees.
8. Any other special clauses, provisions, or agreements needed to protect the Department’s interests.

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HQ R/W will need to pre-approve any “new” special clauses (see list).

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Request FHWA’s preliminary approval of the proposal. Submit

1. Plans, photos, sketches
2. DARC notes
3. Carrier's narrative description of proposal

☐

District executes SLA, granting a six month period (Local Permitting Period)

STEP 6: Local Permitting Period

☐

Work with the carrier to obtain final reviews and approvals

☐

Submit environmental document prepared by carrier for review by the Environmental Branch.

☐

Submit final plans, final DARC notes and carrier’s response to FHWA (via HQ) for final approval.

- ◆ Include original Categorical Exclusion/Categorical Exemption executed by District Environmental Branch.

☐

Submit final plans, final DARC notes, and carrier’s response to HQ Telecommunications Engineer for final approval. Required.

- ◆ May have been provided to the district directly during the preliminary and/or final DARC meeting.

☐

Pend for final approvals, including the local building permit.

STEP 7: Approval to construct

☐

Obtain final approvals as evidenced by:

1. Local building permit
2. Environmental approval
3. Final DARC
4. Final approval of plans

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Annual Base License Fee payment

- ◆ Enter into RWPS as a Telecommunications License account